

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	7950253
<b>Application Number:</b>	10693429
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	2025
<b>Title of Invention:</b>	MIMO SYSTEM WITH MULTIPLE SPATIAL MULTIPLEXING MODES
<b>First Named Inventor/Applicant Name:</b>	J. Rodney Walton
<b>Customer Number:</b>	23696
<b>Filer:</b>	Kenyon S. Jenckes/MICHAEL PAGUYO
<b>Filer Authorized By:</b>	Kenyon S. Jenckes
<b>Attorney Docket Number:</b>	030417
<b>Receipt Date:</b>	02-JUL-2010
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<b>Time Stamp:</b>	17:26:32
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Foreign Reference	WO03034646.pdf	2233349 715bca15c440584b44bda670dc19492d5f899	no	62

### Warnings:

### Information:

2	Foreign Reference	WO01071928.pdf	3077191 30081807834e4abc73f8f4bc691eb2ebd7644c	no	55
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3	Foreign Reference	WO04039011.pdf	9901383 8d24654b3521a62c18ff6c6c3d3a199227d1236c	no	203
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4	Foreign Reference	WO95030316.pdf	412557 78d8c089d413d578819bcac5a4d95184d7d29d9	no	39
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5	Foreign Reference	WO95032567.pdf	2793320 cc1d6ec263d994afefc6f5d1d4113d708d3a30f	no	43
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6	Foreign Reference	WO96022662.pdf	2337937 c96db02abd332738db96c5754815e1b94d88c	no	50
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7	Foreign Reference	WO97019525.pdf	1173846 33a6cc603507747caddc728c0fcc16d892817	no	29
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8	Foreign Reference	WO99016214.pdf	2229462 3d8634841c2432116655a744db81bde65898b79	no	56
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9	Foreign Reference	WO99044379.pdf	1977767 3c1cc1b6eb007736754a1d660aaf15aebc09c4b	no	49
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10	Foreign Reference	WO99057820.pdf	3833193 3d8487adb812ca233d0a9f09313c25ae35c1bf	no	86
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11	Foreign Reference	W004039022.pdf	2223131 2b6a1e453d40467b463b5693d87b7b1d8c3304d	no	50
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12	Foreign Reference	W096035268.pdf	9698015 6b6d3e5dca2d5de0b3c27530b7743e5e133	no	61
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13	NPL Documents	TIA-EIA-IS-2000-2-A.pdf	11323109 2d6c492d1ed3e6f99cc4b0e77c3d493918cc26de	no	448
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14	NPL Documents	A_Simple_Transmit_Diversity_Technique_For_Wireless_Communications.pdf	1669215 6f1e5d4662b5d5c4a080b3d71bc53c19ba2eb	no	8
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15	NPL Documents	High-Rate_Codes_That_Are_Linear_in_Space_and_Time.pdf	14362478 d79814f6c2a642e5893e4f9a6d718d5bce30c3	no	56
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16	NPL Documents	Novel_Space_Time_Processing_of_DS-CDMA.pdf	417394 a7c3dbd6fcafd2d4f5c4a853eab7b4053d8e38	no	6
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17	NPL Documents	MIMO_Transmit_Optimization_for_Wireless_Communication_Systems.pdf	409695 051c7e1528b6c210c8d4d12b77db7a330dc	no	6
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18	NPL Documents	ETSI_TS_101_761_1_v1_3_1_2_001_12.pdf	8080790 8b18b572536d118236da0957796ba5c5d8c48dc	no	90
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19	NPL Documents	On_implementation_of_bit-loading_algorithms.pdf	228406 cbe1b55ecba4de3218c5935777cbeba64e630	no	5
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20	NPL Documents	Pseudo_Orthogonal_Multibeam_Time_Transmit_Diversity.pdf	167034 f18a2cabc1c2500c3423c25af8412261cc4e8	no	5
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21	NPL Documents	Performance_of_MIMO_Systems_with_Channel_Inversion.pdf	318300 6bcac6210b5c60500bce73d94166104212ef93a38	no	6
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22	NPL Documents	A_new_spatio-temporal_equalization_method.pdf	515499 c5e848355ac7ab12af13caf2340305c6e2379e13a2	no	10
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23	NPL Documents	Robust_Frequency_Offset_Estimation_for_Pilot_Symbol.pdf	302268 afcc250684f4d53f7dc8fba1598ec9125581ef998	no	3
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24	NPL Documents	IEEE_802_11a_1999.pdf	3331484 00b489c0830c7e1785c59838a5ae9b7cdece18c	no	93
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25	NPL Documents	Symbol_rate_processing_for_the_downlink_of_ds_cdma_systems.pdf	230378 030b3c156d2efb15c349ba736c2a37170330a7d	no	8
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26	NPL Documents	MULTICARRIER_MODULATION_FOR_DATA_TRANSMISSION_A_N_IDEA.pdf	1777693 49866a58bc802303518b6198ca9f91c100d4a0ff9	no	8
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27	NPL Documents	Utilizing_Quantized_Feedback_Information_in_Orthogonal.pdf	3603426 6d844c85120a0a0b4018adcaab95ca142b6f9879c	no	6
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28	NPL Documents	Short-Term_and_Long-Term_Diagonalization_of_Correlated.pdf	421545 817a57c6cddaf4205305d155387ac18dc8a230	no	5
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29	NPL Documents	A_Low_Complexity_ML_Channel_Estimator.pdf	389438 060124e6c95a3f9196c0a083a23498b1c5b666f	no	5
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30	NPL Documents	A_Practical_Space-Frequency_Block_Coded_OFDM.pdf	265176 2c8924eef7b1191ac3ba1527083e04453d115ee9	no	5
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31	NPL Documents	Multichannel_Adaptive_System_357_364.pdf	660811 277a75c8c0813d228614d67c7c4b9d7d26af6290	no	8
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32	NPL Documents	High_Data_rate_Transmission_with_Eigenbeam_space.pdf	241986 af0181de8729d8f10d7dbcd70b5302144c5b777	no	5
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33	NPL Documents	V-Blast_An_Architecture_for_Realizing_Very_High_Data_Rates.pdf	490255 5b7ca12bf1015668f3b8464c7c91ce00ac47d2	no	6
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34	NPL Documents	On_Application_of_Multiple_Input_Multiple_Output_Antennas.pdf	382999 42d81513066b07d8b2554bd0cf6665c219727e99	no	6
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35	NPL Documents	Performance_analysis_of_different_algorithms_for_cdma.pdf	466886 99576c18547aa3db7965a468c269319c39872a96	no	6
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36	NPL Documents	Improved_Adaptive_Downlink_for_OFDM_SDMA_Based_Wireless.pdf	340196 19a0398c42d24877114db1db256ec53b0523ca1	no	6
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37	NPL Documents	High_bandwidth_efficiency_space-time_turbo_coded_modulation.pdf	541845 0413ab3986dc5d875a70715ca733291a53efdbda	no	6
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38	NPL Documents	Space_Division_Multiplexing_S DM_for_OFDM.pdf	423920 03a694a8154f7b6c88c188f56e1b5dc73b95 a7cd8	no	6
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39	NPL Documents	OFDM_FM_frame_synch_for_ mobile_radio_data_communic ation.pdf	1042540 51ba82eeb6c2665a813cfcc13d12c409cc04 c0a8b	no	12
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40	NPL Documents	A_study_on_subcarrier_adapti ve_modulation_system_p400. pdf	1056094 c32e415d4dddc97240b13119dfe08c266 a7f1c	no	2
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41	NPL Documents	A_mimo_technique_within_th e_UTRA_TDD_standard.pdf	280002 7a8f7ba15017111d2eeec76d3a598fcb3255 9082	no	10
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Total Files Size (in bytes):			95632013		
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<u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.					
<u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.					
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